Office - Supreme Court, U.S.
FILED
JAN 29 1983
ALEXANDER L. STEVAS,
CLERK

Nos. 81-2269 and 82-358

IN THE

Supreme Court of the United States

OCTOBER TERM, 1982

METROPOLITAN EDISON COMPANY, *et al.*,
Petitioners,

v.

PEOPLE AGAINST NUCLEAR ENERGY, *et al.*,
Respondents.

UNITED STATES NUCLEAR REGULATORY COMMISSION AND THE UNITED STATES OF AMERICA,
Petitioners,

v.

PEOPLE AGAINST NUCLEAR ENERGY, *et al.*,
Respondents.

On Writs of Certiorari to the United States Court of Appeals for the District of Columbia Circuit

---

BRIEF FOR *AMICUS CURIAE* AMERICAN SOCIOLOGICAL ASSOCIATION IN SUPPORT OF RESPONDENTS

BRUCE J. TERRIS
PHILIP G. SUNDERLAND
TERRIS & SUNDERLAND
1526 18th St., N.W.
Washington, D.C. 20036
(202) 332-1882
Attorneys for the American Sociological Association

January 29, 1983

WILSON - EPES PRINTING CO., INC. - 789-0096 - WASHINGTON, D.C. 20001

QUESTION PRESENTED

Whether Section 102(2)(C) of the National Environmental Policy Act required the Nuclear Regulatory Commission, when deciding whether to prepare an environmental impact statement on the restart of Three Mile Island—Unit 1, to consider the psychological effects of the restart upon persons residing near the facility.

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	v
INTEREST OF AMERICAN SOCIOLOGICAL ASSOCIATION	1
SUMMARY OF ARGUMENT	2
ARGUMENT	3
I. SOCIOLOGY AND THE OTHER SOCIAL SCIENCES ARE CAPABLE OF PREDICTING THE SOCIAL IMPACTS OF PROPOSED FEDERAL ACTIONS	3
A. Social Impacts Are a Real Consequence of Both Public and Private Actions	4
B. The Social Impacts of Major Federal Actions Are Capable of Being Predicted and Presented in the NEPA Process	6
1. NEPA Does Not Require a Precise Measurement or Quantification of Impacts	6
2. Sociology and the Other Social Sciences Are Fully Capable of Presenting the Description of Social Impacts That NEPA Requires	7
II. THE NRC INTERPRETATION OF THE TERM "ENVIRONMENTAL IMPACT" IN SECTION 102(2)(C), WHICH EXCLUDES ALL NON-PHYSICAL IMPACTS OF A MAJOR FEDERAL ACTION FROM THE ENTIRE NEPA DECISION PROCESS UNLESS PROXIMATELY CAUSED BY A PHYSICAL IMPACT OF THE ACTION, SHOULD NOT BE ADOPTED BY THE COURT	12
A. The NRC Interpretation of Section 102(2)(C) Is Not Supported By NEPA	17

TABLE OF CONTENTS—Continued

Page

B. The NRC Interpretation of Section 102(2)(C) Is Not Supported By the CEQ Regulations 21

C. The NRC Interpretation of Section 102(2)(C) Is Not Supported By Decisions of the Federal Courts 24

D. The NRC Interpretation of Section 102(2)(C) Is Not Supported By Agency Practice Under NEPA 29

CONCLUSION 30

TABLE OF AUTHORITIES

CASES: Page

Andrus v. Sierra Club, 442 U.S. 347 (1979) 21
Branzburg v. Hayes, 408 U.S. 665 (1972) 9
Breckinridge v. Rumsfeld, 537 F.2d 864 (C.A. 6, 1976), certiorari denied, 429 U.S. 1061 (1977) .. 27, 28
Brown v. Board of Education of Topeka, 347 U.S. 383 (1954) 9
City of New York v. United States, 337 F. Supp. 150 (E.D.N.Y. 1972) 7
Como-Falcon Community Coalition, Inc. v. United States Department of Labor, 609 F.2d 342 (C.A. 8, 1979), certiorari denied, 446 U.S. 936 (1980) .. 27
Concerned About Trident v. Rumsfeld, 555 F.2d 817 (C.A.D.C. 1977) 26
First National Bank of Chicago v. Richardson, 484 F.2d 1369 (C.A. 7, 1973) 26, 27
Goodman Group, Inc. v. Dishroom, 679 F.2d 182 (C.A. 9, 1982) 27, 28
Hanly v. Kleindienst, 471 F.2d 823 (C.A. 2, 1972), certiorari denied, 412 U.S. 908 (1973) ..... *passim*
Image of Greater San Antonio, Texas v. Brown, 570 F.2d 517 (C.A. 5, 1978) 27, 28
In re Gault, 387 U.S. 1 (1966) 9
Jackson City, Missouri v. Jones, 571 F.2d 1004 (C.A. 8, 1978) 28
Kleppe v. Sierra Club, 427 U.S. 390 (1976) 29
Maryland-National Capital Park and Planning Comm'n v. U.S. Postal Service, 487 F.2d 1029 (C.A.D.C. 1973) 26, 27
Metlakatla Indian Community v. Adams, 427 F. Supp. 871 (D.D.C. 1977) 28
Monarch Chemical Works, Inc. v. Exxon, 466 F. Supp. 639 (D. Neb. 1979) 28
Nucleus of Chicago Homeowners Ass'n v. Lynn, 524 F.2d 225 (C.A. 7, 1976), certiorari denied, 424 U.S. 967 (1976) 26, 27
Trout Unlimited v. Morton, 509 F.2d 1276 (C.A. 9, 1974) 26
Witherspoon v. Illinois, 391 U.S. 510 (1967) 9

TABLE OF AUTHORITIES—Continued

STATUTES: Page

National Environmental Policy Act, 42 U.S.C. 4332, *et seq.*

Section 102(2)(A), 42 U.S.C. 4332(2)(A) ..7, 11, 20
Section 102(2)(B), 42 U.S.C. 4332(2)(B) 6, 7
Section 102(2)(C), 42 U.S.C. 4332(2)(C) ....*passim*
Section 102(2)(C)(i), 42 U.S.C. 4332(2)(C)(i) .....*passim*
Section 102(2)(C)(ii), 42 U.S.C. 4332(2)(C)(ii) 12
Section 102(2)(C)(iii), 42 U.S.C. 4332(2)(C)(iii) 12

REGULATIONS:

40 C.F.R. 1502.9(c) 14
40 C.F.R. 1502.16(a) 21
40 C.F.R. 1502.16(b) 21
40 C.F.R. 1502.16(d) 21
40 C.F.R. 1502.22 7
40 C.F.R. 1502.22(b) 7
40 C.F.R. 1502.3 21
40 C.F.R. 1508.8 .....21, 22, 29
40 C.F.R. 1508.8(a) 21
40 C.F.R. 1508.8(b) 21
40 C.F.R. 1508.14 .....*passim*
40 C.F.R. 1508.27 23
43 Fed. Reg. 55978 ..... 22, 24

MISCELLANEOUS:

Adams, Smelser and Trieman, ed., *Behavioral and Social Science Research: A National Resource* (Washington D.C.: National Academy Press, 1982) 10, 11
Anderson, *The Federal Bulldozer* (Cambridge, Mass.: MIT Press, 1964) 5
Clark, "Effect of Prejudice and Discrimination on Personality Development" (Midcentury White House Conference on Children and Youth, 1950) 9

TABLE OF AUTHORITIES—Continued

Page

Cottrell, "Death by Dieselization," in *American Sociological Review* (June 1951) 6
Dear and Taylor, *Not on Our Street* (New York: Methuen Press, 1982) 11
DeFluer, D'Antonio and DeFluer, *Sociology: Human Society* (Glenview, Ill.: Scott, Foreman and Co., 1981) 8
Field, "Social Testing for United States Housing Policy: The Experimental Housing Allowance Program" (1980) 10
Frazier, *The Negro in the United States* (1949) 9
Gans, *The Urban Villagers* (Glenco, Ill.: 1962) 5
Hauley and Zimmer, *The Metropolitan Community: It's People and Government* (Beverly Hills, Calif.: 1970) 5
Helco and Rein, "Social Science and Negative Income Taxation" (1980) 10
Kerlinger and Pedhazur, *Multiple Regression in Behavioral Research* (New York: Holt, Rinehart and Winston, 1973) 8
McCall and Simons, eds., *Issues in Participant Observations* (Reading, Mass.: Addison-Wesley Publishing Co., 1969) 8
Myrdal, *An American Dilemma: The Negro Problem and Modern Democracy* (New York: Harper and Brothers, 1944) 9
Orr, "The Health Insurance Study: Experimentation and Health Financing Policy" (1980) 10
Palen, *The Urban World* (New York: McGraw-Hill Book Company, 1981) 5
Rainwater, *Beyond Ghetto Walls* (Chicago: Aldin Publishing Company, 1970) 5
Sheppard, Ferman and Faber, *Too Old to Work, Too Young to Retire: A Case Study of a Permanent Plant Shutdown* (Senate Special Committee on Unemployment Problems, E. McCarthy, Chair. 1959) 6
Sheppard, Aiken, Ferman, *Economic Failure, Alienation and Extremism* (Ann Arbor: University of Michigan Press, 1968) 5

TABLE OF AUTHORITIES—Continued

Page

Stauffer, *The American Soldier: Measurement and Prediction* (vol. 4) (Princeton: Princeton University Press, 1949) 9

Wolpert, *Long-Term Neighborhood Property Impacts of Group Homes for Mentally Retarded People* (Princeton University, November 1982) (unpublished) 11

BRIEF FOR *AMICUS CURIAE* AMERICAN SOCIOLOGICAL ASSOCIATION IN SUPPORT OF RESPONDENTS

In accordance with Rule 36.2, the American Sociological Association (ASA) has filed with the Court letters from counsel for the parties consenting to our appearance as an *amicus curiae* in these cases. We take no position in this brief on the Court's ultimate disposition of these cases. However, because one of our primary interests in the cases is to oppose the interpretation of the National Environmental Policy Act which the petitioner Nuclear Regulatory Commission has presented to the Court, we have characterized our brief as being in support of respondents.

INTEREST OF AMERICAN SOCIOLOGICAL ASSOCIATION

The American Sociological Association (ASA) is a nationwide organization of approximately 14,000 members who are committed to the research, teaching and application of sociology. The Association was formed in 1905 to stimulate and improve research, instruction and discussion among persons engaged in the scientific study of society.

ASA's interest in these cases is twofold. First, it is interested because of the suggestion in the dissenting opinion below that the non-physical impacts of a federal action which are of professional interest to sociologists and other social scientists—for instance, the action's effects upon existing social groups and community institutions—may not be sufficiently measurable or quantifiable by the social sciences to play a legitimate role in the decision process mandated by NEPA. In this regard, we wish to explain to the Court that the information on social impacts which the social sciences are able to present in the NEPA process is sufficiently measurable and quantifiable and, indeed, that it has been the practice of federal agencies to utilize such information in their imple-

mentation of NEPA since the statute was enacted in 1970.

Second, ASA is vitally interested in the extent to which environmental impact statements consider the social and other non-physicial impacts of major federal actions upon the human environment. We believe that the position urged upon the Court by the Nuclear Regulatory Commission (NRC) would, if adopted, considerably narrow the obligation of federal agencies to address these impacts in their environmental statements and would impose a severe and completely illogical limitation on the assessment of non-physical environmental effects in the NEPA process. We therefore wish to inform the Court of the reasons why we believe that it should reject the interpretation presented by the NRC.

SUMMARY OF ARGUMENT

1. The Court should reject the suggestion in the dissenting opinion below that the social impacts of federal actions may not be sufficiently measurable and quantifiable to be assessed in an environmental impact statement. NEPA does not require that social or any other type of environmental impacts be precisely measured or quantified in the environmental statement. On the contrary, the statute and the CEQ regulations acknowledge that environmental impacts generally cannot be measured or quantified and therefore only require that the best possible description of likely impacts be presented in the environmental statement. Sociology and the other social sciences are fully capable of presenting in the EIS process a reasonable description of the social impacts of federal actions. There exists a well-accepted and increasingly sophisticated methodology for studying and determining social impacts. Moreover, the results of this methodology have traditionally been utilized by a variety of forums, including the courts, the federal government when studying programmatic or policy changes, business and, indeed, the federal agencies in preparing environmental im-

pact statements. Thus, there is no basis for questioning the capability of the social sciences to present in the EIS process a description of social impacts which is of the quality which NEPA requires.

2. The NRC interpretation of Section 102(2)(C) of NEPA, which represents a striking departure from the manner in which the statute has been traditionally interpreted and applied, is plainly invalid. It is directly inconsistent with NEPA itself, the CEQ regulations, federal courts decisions and the EIS practice of the federal agencies. Contrary to the NRC position, none of these sources provides that the range of environmental impacts that agencies are to consider under Section 102(2)(C) when deciding whether an EIS is required is broader than the range of impacts that agencies are to assess in the EIS pursuant to Section 102(2)(C)(i). Moreover, contrary to the NRC position, none of these sources even suggests that the impacts of a federal action which are not directly upon the natural or physical environment are to be excluded from the NEPA decision process unless caused by or proximately traceable to an impact on the physical environment. In deciding these cases, therefore, the Court should reject the novel interpretation of NEPA which is urged by the NRC.

ARGUMENT

I. SOCIOLOGY AND THE OTHER SOCIAL SCIENCES ARE CAPABLE OF PREDICTING THE SOCIAL IMPACTS OF PROPOSED FEDERAL ACTIONS

ASA's participation in these cases stems in part from the suggestion in the dissenting opinion in the court of appeals that sociology and the other social sciences may be unable to provide information on the social impacts of a proposed federal action that is sufficiently meaningful for inclusion in the NEPA process.[1] This suggestion is

[1] Our participation is also prompted by a desire to ensure that the opinion of this Court avoids the incorrect references in the opinions below to what the court of appeals apparently considered to be well-

contained in the dissenting opinion's reference to the comment of the Court of Appeals for the Second Circuit in *Hanly v. Kleindienst*, 471 F.2d 823, 833 (C.A. 2, 1972), certiorari denied, 412 U.S. 908 (1973), that "[i]t is doubtful whether the psychological and *sociological* effects upon neighbors constitute the type of factors that may be considered in making [the] determination [whether to prepare an environmental impact statement] since they do not lend themselves to measurement" (emphasis added). 678 F.2d at 240-241 (Pet. App. 39a-40a). Although the dissenting opinion went on to discuss what it termed this "quantification problem" only with respect to the "psychological effects" alleged by respondents, its reference to the *Hanly* comment on "sociological effects" suggests that it also viewed the social impacts of federal actions to be a part of the "quantification problem." [2]

A. Social Impacts Are a Real Consequence of Both Public and Private Actions

Initially, we emphasize that any significant action in society, whether initiated by the public or private sector,

---

accepted and meaningful sociological concepts. For instance, both the majority and dissenting opinions refer to "sociologically based community anxieties" and "socioeconomic anxieties." 678 F.2d at 229, 241, 242 (Pet. App. 28a, 40a, 41a). Neither of these terms, however, represents a meaningful or accepted sociological concept. Sociology involves the scientific study of social organizations and social behavior. While sociologists study and predict the impacts of changed social conditions on existing community institutions, including impacts which might stem from any "anxiety" which a change in conditions may cause in community residents, it is incorrect to refer to such impacts or such anxiety as "sociological" or "sociologically based." Similarly, the lower court's reference to "socioeconomic anxieties" is incorrect. It is true of course that individuals may experience personal anxiety because of economic pressures or the influences exerted upon them by the social institutions in their lives. However, the term "socioeconomic anxiety" is not used by sociology to identify or reflect such anxiety.

[2] For a discussion of the reference in *Hanly v. Kleindienst* to "sociological effects," see p. 26, note 25 below.

may be accompanied by unintended but nonetheless very real impacts upon people, their social institutions and their social behavior. Moreover, these social impacts may occur completely independent of any effect which the action has on the physical environment. Thus, for instance, federal urban renewal efforts in the 1960s all too often led to a change in neighborhood property values, a permanent displacement of typically low-income populations, the elimination of established communities, a change in the racial and socioeconomic make-up of local school systems, and social isolation among those whom the revitalization efforts were intended to assist.[3] Federal subsidization of mortgages and the federally-financed highway program contributed to a number of significant social impacts in the 1950s and 1960s, most notably the migration of residents from the inner cities, the rise of "suburbia" and the corresponding decline in the nation's inner cities.[4]

Actions in the private sector have also been accompanied by unintended but real social impacts. For example, the closing in the 1950s of a Packard automobile factory in Detroit, Michigan, produced a serious sequence of social impacts, including mortgage failures and a generally depressed housing market, the failure of local businesses, increased demands on the city's public and private social services system, high political alienation among the displaced workers relative to the rest of the city's population, and even increased anxiety among the city's employed workers.[5] And, in one of the classic

---

[3] See, *e.g.*, Martin Anderson, *The Federal Bulldozer* (Cambridge, Mass.: MIT Press, 1964); Lee Rainwater, *Beyond Ghetto Walls* (Chicago: Aldin Publishing Company, 1970); Herbert Gans, *The Urban Villagers* (Glencoe, Ill.: 1962).

[4] See J. John [illegible]alen, *The Urban World* (New York: McGraw-Hill Book Co., 1981); Amos Hauley and Basil Zimmer, *The Metropolitan Community: It's People and Government* (Beverly Hills, Calif.: 1970).

[5] Michael Aiken, L. Ferman and H. Sheppard, *Economic Failure, Alienation and Extremism* (Ann Arbor: University of Michigan

pieces of social science literature documenting social impacts, the gradual disintegration of a small town in the southwest as a result of the regional railway system's decision to re-route its trains is reported.[6]

In short, it is beyond doubt that public and private actions, although well-intentioned and even when largely beneficial, are frequently accompanied by serious, adverse social impacts—for instance, upon property values, the stability, cohesion and make-up of neighborhoods, the structure of the family and other social institutions, the ability of government to meet the needs of its citizens and, indeed, the citizens themselves.

B. The Social Impacts of Major Federal Actions Are Capable of Being Predicted and Presented in the NEPA Process

1. *NEPA Does Not Require a Precise Measurement or Quantification of Impacts*

NEPA, we emphasize, does not demand precision in the presentation of the potential impacts (whether physical, social or other) of federal actions. Instead, in Section 102(2)(B), 42 U.S.C. 4332(2)(B), Congress made clear that the impacts of actions cannot be predicted in a highly precise or quantifiable manner by requiring all federal agencies to develop procedures to ensure that "presently unquantified environmental amenities and values may be given appropirate consideration in decision-making along with economic and technical considerations." Under this section, not only is precision not required of the federal agencies when predicting the impacts of proposed actions, but in addition even impacts which cannot be measured or quantified must be

---

Press, 1968); H. Sheppard, L. Ferman and S. Faber, *Too Old to Work, Too Young to Retire: A Case Study of a Permanent Plant Shutdown* (The Senate Special Committee on Unemployment Problems, 1959).

[6] W. Fred Cottrell, "Death by Dieselization," in *American Sociological Review* (June 1951), pp. 358-365.

given genuine consideration in the environmental impact statements.[7]

NEPA's requirement that unmeasureable or unquantifiable impacts be taken into account in the environmental impact statement is addressed in the CEQ regulation which discusses the issue of "incomplete or unavailable information." 40 C.F.R. 1502.22. In situations where information on an important environmental impact cannot be obtained, the regulation requires the agencies to assess the unknown impact by considering the "risk and severity of possible adverse impacts were the action to proceed in the face of uncertainty." 40 C.F.R. 1502.22(b). Thus, where an important impact of a proposed action cannot be unmeasured, let alone unquantified, the CEQ regulations require that it still be recognized and assessed in the environmental impact statement.

In essence, therefore, NEPA and the CEQ regulations require the agencies to develop and present in the environmental impact statement the best possible description of impacts, whether physical, social or other, which the proposed action may have on the human environment. Mathematical quantification and precise measurement of impacts are not mandated. All that is required is that the decisionmaker be alerted to and be given a reasonable description of the action's possible impacts so that they are taken into account in the agency decision process.

2. *Sociology and the Other Social Sciences are Fully Capable of Presenting the Description of Social Impacts that NEPA Requires*

The social sciences are fully capable of developing and presenting in the NEPA process the description of social

---

[7] The courts have held that Sections 102(2)(A) and 102(2)(B) of NEPA are applicable to the preparation of enviromental impact statements under Section 102(2)(C), 42 U.S.C. 4332(2)(C). See, *e.g.*, *Hanly v. Kleindienst*, *supra*, 471 F.2d at 834; *City of New York v. United States*, 337 F. Supp. 150, 158-159 (E.D.N.Y. 1972) (three-judge court).

impacts that the statute requires. The methodology for doing so exists today, is widely accepted and indeed has been developed to a high degree of sophistication.

The methodology for studying and predicting social impacts consists of a variety of information-gathering and information-analysis techniques. Information needed for social impact analysis and prediction is obtained through sample surveys,[8] in-depth interviews,[9] and field studies involving long-term observations and informal interviewing.[10] These data are then analyzed using one of a variety of statistical techniques that are available to the social sciences, ranging from a basic descriptive reporting of the data to quiet sophisticated multi-variate analyses.[11] The use of these techniques allows the researcher to determine the nature and strength of the correlation, if any, between the variables under study. Hypothesized patterns of social behavior are tested against the data. Where correlations are established, theories and models of social life are developed and patterns of change are documented. The social scientists can then credibly generalize these findings to make predictions about the same variables in other situations.

The validity of the methodology which is available to the social sciences for predicting social impacts and, more generally, the capability of the social sciences to predict social behavior are perhaps best shown by the policy-

---

[8] See, *e.g.*, Melvin L. DeFluer, William D'Antonio and Lois B. DeFluer, *Sociology: Human Society* (Glenview, Ill.: Scot, Foreman and Co., 1981), p. 43.

[9] See, *e.g.*, Melvin L.DeFluer, *et al.*, *Sociology: Human Society*, *supra*, p. 43.

[10] See, *e.g.*, George McCall and J. L. Simon, eds., *Issues in Participant Observations* (Reading, Mass.: Addison-Wesley Publishing Co., 1969).

[11] See, *e.g.*, F. Kerlinger and E. Pedhazur, *Multiple Regression in Behavioral Research* (New York: Holt, Rinehart and Winston, 1973).

and decision-making forums which have relied upon social science information and analyses over the years.[12]

The courts have utilized the findings and predictions of the social sciences. A notable example, of course, is this Court's decision in *Brown v. Board of Education of Topeka*, 347 U.S. 483, 494-95 and note 11 (1954), where, in concluding that separate educational facilities were inherently unequal, the Court relied upon the findings of social scientists regarding the impact of segregated schools upon the development of the black child.[13] The Court also relied upon the product of social science research in *In re Gault*, 387 U.S. 1, 20, note 26 (1966) (reports on juvenile delinquency and crime), *Branzburg v. Hayes*, 408 U.S. 665, 694, note 33 (1972) (survey on the effect of subpoenas on the disclosure of information to news media) and in *Witherspoon v. Illinois*, 391 U.S. 510, 520, note 16 (1967) (public opinion polls on capital punishment).

Social sciences have traditionally played an important role in the evaluation of public policy alternatives. For instance, in the fields of housing, welfare and health, when considering major changes in existing programs and policies, the federal government has frequently turned to the social sciences for a prediction of the consequences of these programmatic or policy changes. And the predictions and evaluations which the social sciences

---

[12] A classic example of the ability of social scientists to devise and apply in a concrete setting a system for predicting social behavior is presented by Samuel A. Stauffer in *The American Soldier: Measurement and Prediction* (vol. 4) (Princeton: Princeton University Press, 1949) which discusses the system developed by various social scientists at the conclusion of the second world war to process soldiers out of the armed services.

[13] *E.g.*, K. B. Clark, "Effect of Prejudice and Discrimination on Personality Development" (Midcentury White House Conference on Children and Youth, 1950); R. Frazier, *The Negro in the United States* (1949); Gunnar Myrdal, *An American Dilemma: The Negro Problem and Modern Democracy* (New York: Harper and Brothers, 1944).

have produced have contributed significantly to the federal decision process.[14]

The social scientists' primary information-gathering technique, the sample survey, has become a widely accepted means of predicting social behavior. Today, no major candidate for public office conducts a campaign without extensive polling of the electorate. In the commercial sector, the sample survey has become an indispensible tool for discovering consumer attitudes and preferences. And all levels of government utilize the sample survey to collect information on citizen attitudes for purposes of planning and policy making.[15] In each of these cases, a properly designed sample survey followed by appropriate statistical analysis allows future social behavior to be predicted with a high level of confidence.

Of particular importance to the NEPA process is the "locational analysis" specialty of the social sciences which has developed in the past few decades and which has been accepted in both public and private decision forums. Originating in the 1950s, locational analysis was initially designed to assist business operations in locating their production and distribution facilities. With the public's increased recognition in the 1960s of the negative social consequences of siting decisions (*e.g.*, noise, parking, congestion, displacement, land use, property values, and neighborhood stability), the "locational analysis" specialty developed a methodology for predicting

---

[14] See, *e.g.*, C. G. Field, "Social Testing for United States Housing Policy: The Experimental Housing Allowance Program," H. Helco and Rein, "Social Science and Negative Income Taxation," and L. L. Orr, "The Health Insurance Study: Experimentation and Health Financing Policy" in *Organisation for Economic Co-operation and Development, The Utilization of the Social Sciences in Policy Making in the United States: Case Studies* (Paris: Organisation for Economic Co-operation and Development, 1980), pp. 29-66, 235-282, 359-376.

[15] Robert McC. Adams, Neil Smelser, and Donald Trieman, ed., *Behavioral and Social Science Research: A National Resource* (Washington, D.C.: National Academy Press, 1982), pp. 64-66.

these consequences so they might be considered along with the more traditional cost-benefit factors in the siting decision process. This methodology has developed to the point where it is now possible to measure these unintended but nonetheless real social impacts of siting actions.[16] This has provided a means for both public and private decisionmakers to assess the true social costs of new projects and facilities.

Finally, the NEPA forum itself has traditionally relied upon the contributions of the social sciences and their predictions regarding the social impacts of federal actions. As we show below (see pp. 29-30), since the enactment of NEPA in 1970, the practice of federal agencies has been to assess in their environmental impact statements a wide range of the social impacts of proposed federal actions. This practice shows that for well over a decade the agencies have found the information-gathering and analysis skills of the social sciences to be fully capable of presenting a description of social impacts which complies with NEPA.

Moreover, this practice of the agencies to rely upon the social impact predictions of the social sciences has been fully consistent with the intent of Congress. Section 102(2)(A) of NEPA directs the federal agencies to utilize "a systemic, integrated use of the natural and *social sciences* and the environmental design arts" (emphasis added) when deciding actions which may affect the human environment. Congress could not, we submit, have shown more clearly that it desired the impacts of major federal actions which are subject to analysis by the social sciences to be assessed in environmental impact statements. Nor could it have stated more clearly that

---

[16] See, *e.g.*, Julian Wolpert, *Long-Term Neighborhod Property Impacts of Group Homes for Mentally Retarded People* (Princeton University, November 1982) (unpublished); N. J. Dear and J. M. Taylor, *Not on Our Street* (New York: Methuen Press, 1982). See generally Robert McC. Adams, *et al.*, *Behavioral and Social Science Research: A National Resource*, *supra*, pp. 81-83.

it considered the description of social impacts which sociology and the other social sciences are capable of providing to be sufficiently meaningful for inclusion in environmental statements.

II. THE NRC INTERPRETATION OF THE TERM "ENVIRONMENTAL IMPACT" IN SECTION 102(2)(C), WHICH EXCLUDES ALL NON-PHYSICAL IMPACTS OF A MAJOR FEDERAL ACTION FROM THE ENTIRE NEPA DECISION PROCESS UNLESS PROXIMATELY CAUSED BY A PHYSICAL IMPACT OF THE ACTION, SHOULD NOT BE ADOPTED BY THE COURT

Section 102(2)(C) of NEPA, 42 U.S.C. 4332(2)(C), requires the preparation of an environmental impact statement in conjunction with any proposal for a "major Federal action[ ] significantly affecting the quality of the human environment * * *." The environmental statement is to include, *inter alia*, an assessment of the "environmental impact of the proposed action" (Section 102(2)(C)(i)), including "any adverse environmental effects which cannot be avoided" if the action is taken (Section 102(2)(C)(ii)), and an assessment of the "alternatives to the proposed action" (Section 102(2)(C)(iii)).

These statutory provisions require two distinct EIS-related decisions by a federal agency which proposes an action which may require preparation of an environmental statement. The agency must first determine whether the action is of the kind requiring an EIS—*i.e.*, whether it is "major" and whether it will "significantly affect[ ] the quality of the human environment." If the agency concludes that the requirement for an EIS has been triggered, it must then determine the scope of its assessment obligations—*i.e.*, the nature and extent of the action's "environmental impact" which it must address in the environmental statement. We refer below to these decisions as the EIS "trigger" and "scope" decisions.

It is important that the status of the decision which the NRC made below—*i.e.*, whether it was a "trigger"

or a "scope" decision—be accurately characterized. This is because, as we show below, the Council on Environmental Quality and the courts have distinguished the NEPA obligations of federal agencies depending upon whether they are at the "trigger" or "scope" decision stage of the NEPA process.

The issue presented in these cases is whether the NRC, in deciding whether to prepare an environmental impact statement on the restart of Three Mile Island-Unit 1 (TMI-1), was required to consider the psychological effects [17] of the restart upon persons residing near the facility. This issue, whether to prepare an EIS, involves the EIS "trigger" decision.

The NRC, however, appears to believe that the question before it below involved the EIS "scope" decision for it analyzes the issue in these cases in terms of the "assessment obligation" which NEPA imposes upon federal agencies. NRC Br. 24. Further, it argues that its decision not to consider the psychological effects of the

---

[17] Respondents argued before the NRC and the court of appeals that the restart of TMI-1 would also have certain social and economic impacts on the communities surrounding Three Mile Island. See 678 F.2d at 230 (Pet. App. 29a). The court of appeals characterized these impacts as secondary environmental impacts which, under the CEQ regulations (see 40 C.F.R. 1508.14), may not by themselves require the preparation of an environmental statement and thus, if unaccompanied by a significant physical environmental impact, are to be excluded from the EIS "trigger" decision. However, having concluded that an environmental statement may be required on the TMI-1 restart by virtue of the psychological impacts alleged by respondents, the court of appeals ruled, consistent with the CEQ regulations, that those secondary social and economic impacts would have to be considered in any environmental statement which the NRC decided to prepare. See 678 F.2d at 230-231 (Pet. App. 29a-30a). This ruling is not before the Court in these cases. Rather, petitioners have restricted their challenge to the court of appeals' conclusion that the psychological effects associated with the restart of TMI-1 constitute an "environmental impact" under Section 102(2)(C) which is capable of triggering the requirement for an EIS.

TMI-1 restart is supported by Section 102(2)(C)(i) of NEPA, which addresses the "environmental impact" of a federal action that must be assessed in an EIS, rather than by Section 102(2)(C), which involves whether an EIS must be prepared. See *id.* at 24, 30-31.

We submit that the record demonstrates that the Commission's characterization of its decision below as an EIS "scope" decision is incorrect. Before the Atomic Safety and Licensing Board, the Commission staff prepared an environmental impact analysis (EIA) on the restart of Unit 1 (see J.A. 48-87) to assist the Board in deciding whether a new environmental impact statement was required. In that EIA, the staff addressed numerous physical impacts of the restarted unit. See NRC Br. 9, note 6. On the basis of this EIA, the Licensing Board determined that a new EIS on the restart was not required (*ibid.*), and its determiantion was affirmed by the Atomic Safety and Licensing Appeal Board (*In Re Metropolitan Edison Co. (Three Mile Island Power Station Unit 1)*, Docket No. 50-289 (ALAB-705)). See also NRC Br. 18, note 13 (the Appeal Board affirmed the "Licensing Board's determination * * * that *no full scale environmental impact statement* need be prepared" (emphasis added)).

The court of appeals recognized that the issue before it involved whether the NRC was required to prepare an EIS. However, the court characterized this issue in terms of the NRC's obligation to prepare a supplement to the EIS which had been prepared in conjunction with the licensing of TMI-1 in 1974, rather than an entirely new EIS on the restart. See 678 F.2d 224-227 (Pet. App. 23a-26a). This characterization, we believe, was incorrect. The duty to supplement an EIS arises prior to the time a final decision is reached on the federal action which is addressed in the EIS. See 40 C.F.R. 1502.9(c). This is because the supplement is intended to ensure that the EIS which is considered by the decisionmaker contains a full analysis of the environmental consequences

of the *proposed* action and the alternatives to it. Once a final decision on the action is taken, there clearly is no need to supplement the original EIS. Since the NRC had reached a final decision on the licensing of TMI-1 in 1978 and, indeed, since that decision was fully implemented with the construction of the facility, there was technically no need at the time of restart to "supplement" the earlier EIS. In any event, even if the court of appeals was correct in characterizing the NRC's NEPA obligations in terms of an EIS supplement, the fundamental question before the Commission was *whether* to prepare a new document on the environmental impacts of the TMI-1 restart, not *what* impacts to assess in a document which it had already decided to prepare. In declining to prepare any such new document, the Commission clearly was making the EIS "trigger" decision.[18]

NRC's position that the issue in these cases must be resolved in its favor consists of two parts.

First, it presents a radically new interpretation of Section 102(2)(C) of NEPA. It initially contends that the range of environmental impacts of a federal action which are applicable to the EIS "trigger" decision under Section 102(2)(C) is broader than the range of impacts applicable to the EIS "scope" decision under Section 102(2)(C)(i). See NRC Br. 24, 30-31. Having differentiated among an action's environmental impacts for purposes of the EIS "trigger" and "scope" decisions, it then contends that the impacts applicable to the "scope" decision are all the impacts which affect the natural and physical environment but only those non-physical impacts which are "proximately traceable to the impact of the federal action

---

[18] Of course, if the NRC had decided that a new EIS was required, it would not have been required to repeat in that statement any discussion of environment impacts which had been adequately addressed in the original TMI-1 EIS. It could have included any of the analysis in the original EIS by reference and dealt in the new EIS only with matters which had not been considered in the original EIS.

upon the natural or physical environment, or flow from a physically measurable or discernable variable, such as heat, radiation, noise, pollution, or odors in that environment." *Id.* at 27. See *id.* at 32, 43. Under the NRC interpretation, therefore, any non-physical impact of a federal action which lacks a "causal nexus" (*id.* at 28) with an impact upon the natural or physical environment does not qualify as an "environmental impact" and, as a result, is not to be assessed in any EIS.

Second, NRC applies its interpretation of Section 102(2)(C) to these cases by arguing that the psychological effects alleged by respondents are not "proximately traceable" to any physical environmental impact of the TMI-1 restart and therefore fall outside its NEPA assessment obligation. NRC Br. 44-48.

We address below only the first NRC contention and the interpretation of Section 102(2)(C) which it has presented to the court.[19] The Commission's interpretation represents a striking departure from the manner in which NEPA has been interpreted and applied since its enactment in 1970. If adopted by the Court, this interpretation would dramatically alter the obligations of federal agencies under NEPA. In particular, it would significantly reduce the scope, and therefore the value, of the environmental assessments which are conducted of major federal actions. Thus, in resolving the issue in these cases, we urge the Court to recognize that adoption of the NRC interpretation would have major implications for decisionmaking throughout the federal government.

For the reasons below, we believe that the NRC interpretation of Section 102(2)(C) must be rejected by the Court.

---

[19] We do not address NRC's second contention since our interest in these cases is in the interpretation of Section 102(2)(C) which the Commission has presented rather than the application of that interpretation to the particular circumstances surrounding the restart of TMI-1.

A. The NRC Interpretation of Section 102(2)(C) Is Not Supported by NEPA

Section 102(2)(C) of NEPA requires federal agencies, when making both their "trigger" and "scope" decisions, to consider the impacts which the action they are proposing will have upon the "human environment." Section 102(2)(C), which governs the "trigger" decision, requires the preparation of an EIS on any major action "significantly affecting the quality of the human environment * * *." Section 102(2)(C)(i), which governs the "scope" decision, requires that an EIS assess the "environmental impact" of the action. There is no suggestion in the Act that the same impact of a proposed action will qualify as an environmental impact for purposes of the "trigger" decision but not for purposes of the "scope" decision. Nor is there any suggestion in the Act that the same or similar impacts of an action will qualify as an environmental impact under Section 102(2)(C) if possessing a "causal nexus" with a natural or physical environmental impact, but will not qualify if lacking this nexus. Yet these are precisely the consequences of the interpretation of Section 102(2)(C) which the NRC has presented to the Court.

This is shown by the following hypothetical example.

A federal agency has proposed to license a series of major fossil-fuel energy facilities just outside of the town of Main, Wyoming. Main has a population of 1,000 people, lacks any industry, and is the center of a prosperous agricultural region. It is acknowledged that construction and operation of these facilities will have major non-physical impacts. Since the facilities require enormous amounts of water to conduct operations, they will cause substantial reductions in the water that is available to irrigate the region's farms. In fact, the decrease in irrigation water is so significant that it is expected that as many as 50 percent of the region's farms will lack adequate water to continue operations and that the hundreds of farmers thus displaced by the proposed action will migrate to Main to

seek employment and to re-establish their lives. It is also expected that the proposed energy facilities will attract many other farmers to the town, not because they will be forced to close their farms by the lack of water, but because they will be drawn to the higher wages and less burdensome working conditions which, if the proposed facilities are constructed, the town will offer. Finally, construction and operation of the facilities are expected to bring hundreds of other new residents into the town from outside the region.

The influx of farmers and outsiders will have serious social and economic impacts upon the Town of Main and its current population. The cost of the town's housing will be severely affected by the increased demand. Police, fire and other municipal services will have to be significantly increased with consequent demands upon the town's treasury. The new residents will require various goods and services which in turn will cause additional individuals to migrate into the area. Moreover, it is expected that the portion of the town's new residents who come from outside the region will differ considerably in background, values and lifestyle from the town's current residents and those who migrate from within the region. It is therefore expected that the rural tranquility which has characterized Main for over a half century will be significantly altered by the proposed federal action.

In determining whether an EIS is required on this proposed federal action, under the NRC interpretation of Section 102(2)(C), the agency would consider all the impacts of the action upon the human environment. See NRC Br. 24, 30-31. Thus in addition to the impacts on the region's water supply, the agency would take into account the impacts upon the Town of Main caused by the influx of farmers who would be displaced by the action, farmers who would voluntarily leave their farms, and outsiders. Assuming that these impacts were sufficient to trigger the requirement for an EIS, the agency would

then determine the impacts which it had to assess in the EIS.

Under the NRC interpretation of Section 102(2)(C), only *some* of the non-physical socioeconomic impacts of the action which are associated with the influx of new residents into the Town of Main would be assessed in the EIS. Since the closing of the region's farms and the migration of displaced farmers into the town would be "proximately traceable" to a physical environmental effect (the re-allocation of the region's water supply), the socioeconomic effects on the town produced by this migration would qualify as an "environmental impact," as interpreted by NRC, and would be assessed in the EIS. On the other hand, the migration of other farmers and of outsiders into the town and the socioeconomic effects which would follow would not be assessed in the EIS since the migration of these groups would not be caused by, or traceable to, any natural or physical environmental impact of the federal action.

In short, under the NRC interpretation, several significant impacts of this federal action would qualify as environmental impacts for purposes of the EIS "trigger" decision but not for purposes of the "scope" decision. Moreover, the same or similar non-physical impacts of the action would be given very dissimilar treatment under the same statutory terminology.

As indicated earlier, there is nothing in the language of NEPA to support these distinctions. There is no reason to consider "affecting the quality of the human environment" (Section 102(2)(C)) different from "environmental impact" (Section 102(2)(C)(i)). Simply stated, the Act provides no basis for treating the same impact of a federal action as an environmental impact in some situations but not in others.[20]

---

[20] As we discuss in Sections B and C below, CEQ and the courts have limited the consideration of some environmental impacts at the time of the EIS "trigger" decision but not at the time of the "scope"

In addition, the NRC interpretation is directly inconsistent with Section 102(2)(A) of NEPA, 42 U.S.C. 4332(2)(A). It requires all federal agencies, when planning and deciding actions which may impact on man's environment, to "utilize a systemic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts * * *." Since Section 102(2)(A), unlike Section 102(2)(C), does not apply only to major "actions significantly affecting the quality of the human environment," it clearly applies to the "trigger" decision which determines whether an EIS must be prepared. And, just as clearly, its mandate must be considered when interpreting the scope of the "environmental impact" which Section 102(2)(C) requires the EIS to assess.[21] Thus, when deciding whether to prepare EISs and when preparing them, the agencies are required by Section 102(2)(A) to utilize the social sciences to assess the impact of their proposed actions on the human environment. This mandate for the maximum use of the social sciences in federal decisionmaking demonstrates that Congress intended federal agencies, in EISs and elsewhere in their decision processes, to consider a broad range of the non-physical impacts that their actions might have. By significantly limiting the non-physical impacts which the agencies must assess in environmental impact statements, the NRC interpretation of Section 102(2)(C) is fundamentally at odds with this Congressional intent.

For these reasons, we submit that the NRC interpretation of Section 102(2)(C) lacks any support in the statute itself.

---

decision. However, this limitation is not based on the position that these impacts do not constitute an "environmental impact" under Section 102(2)(C) but rather that Congress simply did not intend them to trigger the EIS requirement by themselves.

[21] See p. 7, note 7 above.

B. The NRC Interpretation of Section 102(2)(C) Is Not Supported by the CEQ Regulations

The CEQ regulations on NEPA, which this Court has held are entitled to substantial deference (*Andrus v. Sierra Club*, 442 U.S. 347, 357-358 (1979)), do not provide any support for the interpretation of "environmental impact" which the NRC has presented in these cases.

The CEQ regulations do not treat the environmental impacts of a federal action separately for purposes of the EIS "trigger" and "scope" decisions. Rather, with one exception noted below (see pp. 23-24), in which they restrict the consideration of certain non-physical impacts at the time of the EIS "trigger" decision, the regulations provide that the two decisions are to be based upon the same environmental impacts. They provide no support for the NRC position that the range of impacts to be addressed in the "scope" decision is narrower than the range of impacts which are to be considered in the "trigger" decision.

The CEQ regulations do not directly define the Section 102(2)(C) phrase "affecting the quality of the human environment" or the Section 102(2)(C)(i) term "environmental impact." Rather, they define separately the terms "effects" and "human environment" and provide that these definitions govern both the "trigger" (see 40 C.F.R. 1502.3) and the "scope" (see 40 C.F.R. 1502.16(a), (b) and (d)) decisions.

Under the regulations, the terms "effects" and "impacts" are synonomous. See 40 C.F.R. 1508.8. "Effects" includes both "direct" and "indirect" effects. The former are effects "caused by the action and occur at the same time and place." 40 C.F.R. 1508.8(a). The latter are effects "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. 1508.8(b). Further, the regulations state that the following "effects," if "on the human environment," are subject to NEPA (40 C.F.R. 1508.8):

> Effects includes [sic] ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.

The CEQ definition of "human environment" provides that it "shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of 'effects' (§ 1508.8).)" 40 C.F.R. 1508.14. Thus, the Council has divided the "human environment" into two components—a physical and a non-physical environment, with the latter defined as "the relationship of people with [the physical] environment." It has then shown how this definition is to be interpreted by referring to its definition of "effects." In other words, "the relationship of people with [the physical environment]" is to be viewed in terms of the type or character of effects which federal actions may produce—namely, "ecological * * *, aesthetic, historic, cultural, economic, social, [and] health." 40 C.F.R. 1508.8.[22] Under the CEQ regulations, therefore, any proposed federal action which will affect the lives of people in one of these ways qualifies as an action "affecting the quality of the human environment" under Section 102(2)(C), and the Section 1508.8 "effects" that it will produce constitute environmental impacts for purposes of the "trigger" and "scope" decisions.[23]

---

[22] It is important to note that CEQ initially proposed to define the "human environment" as the natural and physical environment and the "interaction of people with that environment." Comments to the proposed definition suggested that the use of the term "interaction" would limit the definition to "the natural and physical aspects of the environment." Stating that this was not its intent, the Council replaced the term "interaction" with "relationship to ensure that the definition is intepreted as being inclusive of the human environment." 43 Fed. Reg. 55978, 55988 (November 29, 1978).

[23] NEPA, of course, requires more than just an impact upon the human environment for the EIS requirement to be triggered. Sec-

We emphasize that there is nothing in the CEQ regulations to support the NRC position that the non-physical effects of a federal action qualify as an "environmental impact" only if caused by a physical impact. On the contrary, the regulations specifically address the issue of causation in the definition of "effects." Both "direct" and "indirect" effects are defined as those "*caused by the [proposed federal] action* * * *" (emphasis added), not, as the NRC contends, as those caused by a physical environmental impact of the federal action.

Nonetheless, the NRC contends (NRC Br. 37-38) that its interpretation is fully consistent with the CEQ regulations. In this regard, it refers to the portion of the CEQ definition of "human environment" which provides that (40 C.F.R. 1508.14):

> economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

In fact, this provision plainly does not support the Commission's position. As CEQ explained in the preamble to its NEPA regulations, it added this provision to the definition of "human environment" to reflect the "line * * * drawn by the cases" which hold that "economic or social effects are not intended by themselves to require preparation of an environmental impact statement" and to incorporate the "Council's determination, which accords with the case law, that NEPA was not intended to require an environmental impact statement where the closing of a military base, for example, only affects such things as the composition of the population

---

tion 102(2)(C) requires that the impacts be significant before an EIS is required. See 40 C.F.R. 1508.27. The issue of significance is not before the Court in these cases.

or the level of personal income in a region." 43 Fed. Reg. 55978, 55988-55989 (November 29, 1978). In short, the intent of CEQ in adding this provision to the definition of "human environment" was to exclude from the NEPA "trigger" decision certain non-physical impacts of a proposed federal action when they were not accompanied by any physical environmental impacts.

Contrary to the NRC contention (NRC Br. 37-38), CEQ did not intend to exclude these non-physical impacts from the NEPA "scope" decision or to require that they have a "causal nexus" with a physical impact in order to qualify as an "environmental impact" which must be assessed in an EIS. On the contrary, in 40 C.F.R. 1508.14, CEQ specifically characterized these non-physical impacts as "environmental effects." Moreover, it specifically provided that, even though these impacts are not sufficient by themselves to trigger the requirement for an EIS, they are nonetheless to be included in the "scope" decision and assessed in an environmental impact statement as long as they are "interrelated" with—not caused by—a physical environmental impact of the action.[24]

For these reasons, we submit that the NRC interpretation of Section 102(2)(C) is in direct conflict with the CEQ regulations.

C. The NRC Interpretation of Section 102(2)(C) Is Not Supported by Decisions of the Federal Courts

The NRC argues that its interpretation of Section 102(2)(C) is supported by decisions of the federal courts. NRC Br. 38-40. We strongly disagree. We do

---

[24] The "interrelated" requirement in Section 1508.14 merely requires that there be a relationship between, or a common characteristic shared by, the physical and non-physical impacts of the federal action. This is satisfied, for instance, where the effects are similar or cumulative or where they stem from a common source. The requirement certainly does not show, as the NRC contends (NRC Br. 38), that Section 1508.14 "embodies and implements the requirement of environmental causation that is prescribed by Section 102(2)(C)(i)."

not know of any decision which holds or even suggests that, as the Commission contends, the consideration of non-physical impacts is broader for the EIS "trigger" decision than for the "scope" decision. Indeed, in *Hanly v. Kleindienst*, *supra*, 471 F.2d at 835, the Court of Appeals for the Second Circuit expressly recognized that "an agency, in making a threshold determination as to the 'significance' of an action, is called upon to review in general fashion *the same factors* that would be studied in depth for preparation of a detailed environmental impact statement * * *" (emphasis added). Nor are we aware of any decision which limits the non-physical environmental impacts of an action that are subject to Section 102(2)(C) to those which are "proximately traceable" to or possess a "causal nexus" with a physical environmental impact of the action. Finally, we do not know of any decision which, like the NRC, interprets the section in a manner which results in the same or very similar types of environmental impacts associated with a federal action receiving dissimilar "environmental impact" classifications.

We recognize that some courts have excluded certain non-physical environmental impacts from EIS decisions under Section 102(2)(C). However, they have done so on grounds considerably more narrow than those urged by the NRC. These decisions fall into two general categories.

First, some courts have excluded the non-physical impacts of a federal action from EIS decisions on the ground that the causal relationship between the federal action and the alleged impacts was too tenuous and therefore that the impacts were too speculative. For instance, in *Hanly v. Kleindienst*, *supra*, plaintiffs claimed that the General Services Administration was required to prepare an environmental impact statement on a detention facility which was proposed for their neighborhood. In refusing to require an EIS, the court declined to consider the "psychological distaste" which residents might have for such a facility. Such an effect of the proposed action, if con-

cluded, was simply too speculative. Thus, it stated (471 F.2d at 833):

> For the most part [plaintiffs'] opposition is based upon a psychological distaste for having a jail located so close to residential apartments. * * * It is doubtful whether psychological and sociological effects [25] upon neighbors constitute the type of factors that may be considered in making such a determination [*i.e.*, the EIS trigger decision] since they do not lend themselves to measurement. [footnote omitted.]

See *Concerned About Trident v. Rumsfeld*, 555 F.2d 817, 830 (C.A.D.C. 1977); *Trout Unlimited v. Morton*, 509 F.2d 1276, 1284 (C.A. 9, 1974).[26]

---

[25] The court's reference to "psychological and sociological effects" appears to have been to the jail's impact upon "the sensibilities of [the] neighborhood" (471 F.2d at 835), rather than to its social and economic impacts on the neighborhood. That the court was not suggesting that the socioeconomic impacts of a federal action might be excluded from the EIS decisions is shown by its earlier decision in *Hanly* where it held that environmental impacts under NEPA include "the quality of life for city residents" and it ordered the GSA, when making its EIS "trigger" decision, to consider the jail's effects upon "crime, congestion and even availability of drugs" since they "all affect the urban 'environment' * * *." 460 F.2d 640, 647.

[26] The statement quoted above from *Hanly v. Kleindienst* is the basis for the decisions of a number of courts not to require agencies to consider certain non-physical impacts of federal actions when making the EIS "trigger" decision. *E.g.*, *Nucleus of Chicago Homeowners Ass'n v. Lynn*, 524 F.2d 225, 231 (C.A. 7, 1976), certiorari denied, 424 U.S. 967 (1976); *Maryland-National Capital Park and Planning Comm'n v. U.S. Postal Service*, 487 F.2d 1029, 1039 (C.A. D.C. 1973); *First National Bank of Chicago v. Richardson*, 484 F.2d 1369, 1380, note 13 (C.A. 7, 1973). These cases are cited by NRC in support of its contention that the "courts of appeals have uniformly recognized that psychological and *socioeconomic effects* that are not environmentally grounded [*i.e.*, that lack a 'causal nexus' with a physical environmental impact] are outside the scope of the analysis required by NEPA" (emphasis added). NRC Br. 38.

This contention is absolutely without merit. In none of the cases to which the NRC cites did the court hold that the "socioeconomic

Second, a number of courts have refused to require preparation of an environmental impact statement where the sole impacts of the proposed action were socioeconomic impacts.[27] These courts have concluded that Congress did not intend the non-physical socioeconomic impacts of a federal action, when unaccompanied by some impact upon the physical environment, to trigger the EIS requirement. *E.g., Goodman Group, Inc. v. Dishroom*, 679 F.2d 182, 185-186 (C.A. 9, 1982); *Image of Greater San Antonio, Texas v. Brown*, 570 F.2d 517, 522 (C.A. 5, 1978); *Breckinridge v. Rumsfeld*, 537 F.2d 864, 865-866 (C.A. 6, 1976), certiorari denied, 429 U.S. 1061 (1977). See *Como-Falcon Community Coalition, Inc. v.*

---

effects" of a federal action had to be linked to a physical environmental impact in order to qualify as a Section 102(2)(C) environmental impact. Indeed, the portions of these decisions upon which the NRC relies did not even involve any socioeconomic impacts of a federal project but instead, as in *Hanly*, a project's impacts upon the "sensibilities" of neighborhoods and the possible displeasure which it might cause individual residents because of their personal distaste for the nature of the project or the type of person who would be associated with it. *E.g., First National Bank of Chicago v. Richardson, supra*, 484 F.2d at 1380, note 13 (the proposed jail would affect the " 'sensibilities' of the neighborhood"); *Maryland-National Capital Park and Planning Comm'n. v. U.S. Postal Service, supra*, 487 F.2d at 1038-1039 (the proposed mail facility would cause "esthetic impact * * * pertain[ing] essentially to issues of individual and potentially diverse tastes"); *Nucleus of Chicago Homeowners Ass'n. v. Lynn, supra*, 524 F.2d at 231 (the proposed low-income housing project which would trigger the "fears of the neighbors of prospective public housing tenants"). Thus, in no sense do these cases support NRC's contention that the courts have "uniformly recognized" that socioeconomic impacts may qualify as Section 102(2)(C) environmental impacts only when causally linked to a physical impact of the federal action.

[27] Some of these decisions form the basis of the CEQ regulation at 40 C.F.R. 1508.14. See pp. 22-24 above. We note that these cases did not involve allegations that a federal action would offend personal tastes or "sensibilities." Rather, they typically involved population changes associated with federal actions and the attendant social and economic impacts upon existing communities.

United States Department of Labor, 609 F.2d 342, 345 (C.A. 8, 1979), certiorari denied, 446 U.S. 936 (1980). This conclusion has been based on the view that the primary concern of NEPA was with the physical environmental resources of the nation (see, *e.g.*, *Image of Greater San Antonio, Texas v. Brown*, *supra*, 570 F.2d at 522) and that limiting consideration of "[e]conomic, social, esthetic, or cultural effects" to EISs in which significant physical impacts are also discussed would best effectuate the intent of Congress in enacting NEPA (see, *e.g.*, *Goodman Group, Inc. v. Dishroom*, *supra*, 679 F.2d at 185).

We emphasize that the courts which have held that non-physical socioeconomic impacts may not by themselves cause an affirmative EIS "trigger" decision have not also held that these non-physical impacts may never be an "environmental impact" under Section 102 (2)(C) and therefore never need to be analyzed in an environmental impact statement. On the contrary, many of these courts and others, including some upon which the NRC relies (NRC Br. 38-39), have held that, where an environmental impact statement is required to be prepared on a proposed federal action, it must assess a broad range of the action's non-physical impacts, including increases in population and the demand for city services, changes in the rural or residential character of neighborhoods, unemployment, urban blight, crime, and pressures on community support facilities. *E.g.*, *Goodman Group, Inc. v. Dishroom*, *supra*, 679 F.2d at 185; *Jackson City, Missouri v. Jones*, 571 F.2d 1004, 1007 (C.A. 8, 1978); *Breckinridge v. Rumsfeld*, *supra*, 537 F.2d at 865-866; *Hanly v. Kleindienst*, *supra*, 471 F.2d at 827; *Monarch Chemical Works, Inc. v. Exxon*, 466 F. Supp. 639, 655 (D. Neb. 1979); *Metlakatla Indian Community v. Adams*, 427 F. Supp. 871, 875 (D.C.C. 1977). Moreover, the courts in these cases have not required this assessment of non-physical impacts only after finding that they were caused by or were promixately traceable to an impact of the federal action on the physi-

cal environment. Rather, they have followed the CEQ regulations and have required the EIS to consider all important social, economic and other non-physical "environmental effects" (40 C.F.R. 1508.14) which were "caused by the action" (40 C.F.R. 1508.8).

We therefore submit that the federal court decisions provide no support for the interpretation of Section 102 (2) (C) which the NRC urges the Court to adopt.

D. The NRC Interpretation of Section 102(2)(C) Is Not Supported by Agency Practice Under NEPA

Finally, we emphasize that, to the best of our knowledge, the "causal nexus" interpretation of "environmental impact" presented by the NRC has never been followed by the federal agencies. Once a decision to prepare an EIS is made, the practice of federal agencies is to prepare and issue a statement which assesses a broad range of the non-physical impacts of the proposed action and of its alternatives, whether or not these impacts are caused by or stem from any physical impact.

For instance, the environmental statement lodged with the Court in *Kleppe v. Sierra Club*, 427 U.S. 390 (1976), which addressed the environmental impact of federal coal leasing in the Eastern Powder River Coal Basin of Wyoming assessed numerous social, economic and other non-physical impacts of the proposed federal action, even though most lacked any "causal nexus" with the physical effects of the proposed coal development.[28] Similarly, the environmental statements prepared subsequent to the Court's decision in *Kleppe* which addressed other federal coal leasing decisions in the Northern Great Plains assessed a wide range of non-physical impacts, despite the absence of any "causal nexus" with physical impacts of the actions.

---

[28] Final Environmental Impact Statement, "Eastern Powder River Coal Basin of Wyoming" (Department of Agriculture, Department of Interior and Interstate Commerce Commission; October 18, 1974), pp. I-392 to I-458, I-554 to I-612, and I-664 to I-669.

Thus, in calling for a significant reduction in the environmental impacts assessed in an environmental impact statement, the NRC interpretation of Section 102(2)(C) runs counter to the manner in which the federal agencies have consistently interpreted and applied the section.

CONCLUSION

For these reasons, we submit that the NRC's interpretation of Section 102(2)(C) is invalid and should not be utilized by the Court in deciding the issue in these cases. Rather, the issue should be decided on the basis of existing NEPA law, namely, the CEQ regulations and the federal court decisions discussed above which interpret Section 102(2)(C). Thus, the Court should determine whether Congress intended the type of environmental impacts alleged by respondents, either standing alone or in conjunction with the physical impacts of the TMI-1 restart, to *trigger* the requirement for an environmental impact statement. This determination, we submit, should be made without regard to the presence or absence of any "causal nexus" between the impacts alleged by respondents and the impacts of the restart on the natural or physical environment. Moreover, this determination need not resolve whether the impacts alleged by respondents must be included in the EIS "scope" decision since this question is not before the Court.

Respectfully submitted,

BRUCE J. TERRIS
PHILIP G. SUNDERLAND
TERRIS & SUNDERLAND
1526 18th St., N.W.
Washington, D.C. 20036
(202) 332-1882
Attorneys for the American Sociological Association

January 29, 1983